Cross-ministerial Strategic Innovation Promotion Program (SIP) Term 3

Development of Smart Mobility Platform

Subtheme I: Redesigning Mobility Services

# Development of Smart Districts with Advanced Mobility Systems

March 2025

Tokai National Higher Education and Research System

# 1-1 Subtheme I: Smart mobility vision and subthemes

**VISION ★ End the "mobility divide" so that everyone and everything has access to independent, safe, comfortable mobility that is friendly to people and the environment**

- ● Offers convenient, sustainable mobility services
- ◆ Made up of diverse communities that offer safety, security, and ease
- ◆ Urban planning linked to mobility services
- ■ Offers MaaS solutions featuring end-to-end logistics systems

**Social changes**

Shrinking/aging population, fewer children, advancing DX tech

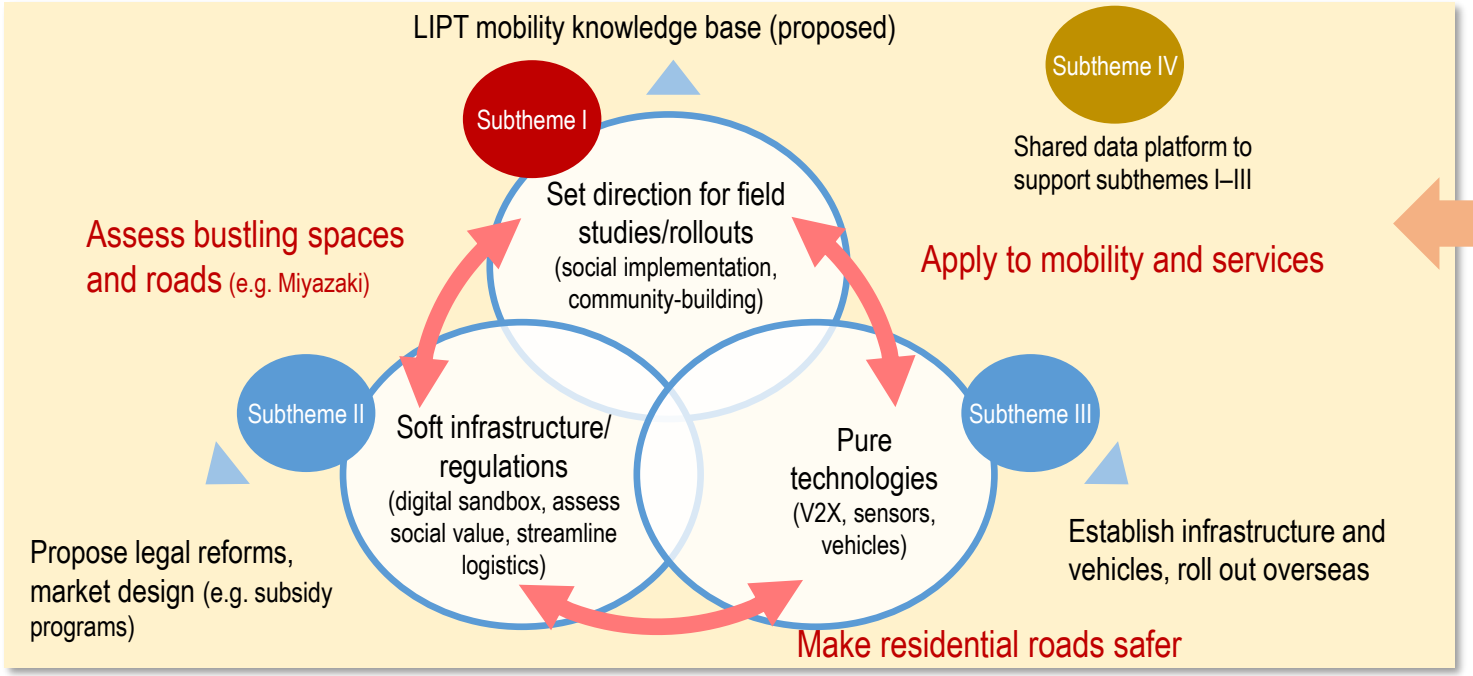
**Relevant social challenges**

**Ensuring/maintaining mobility services**
- Local mobility services are going extinct
- The business models and systems that support local transportation are isolated and rigid

**Optimizing flows (people, vehicles, and goods)**
- Thru traffic in residential areas leads to accidents, saps area vitality, and erodes communities
- The logistics industry relies on human labor and is increasingly unsustainable

**Ensuring traffic safety**
- Major accidents
- Compromised mobility (e.g. among the elderly)

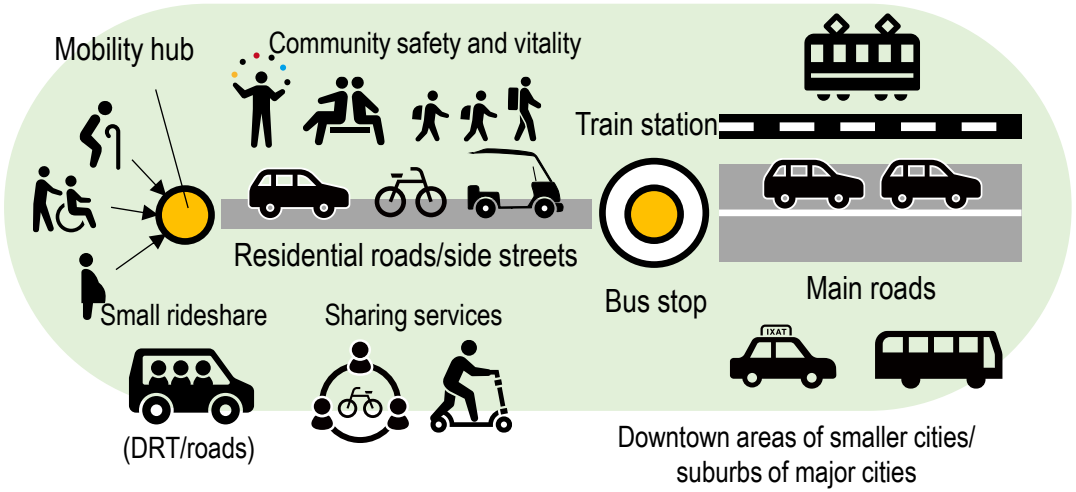
**Linking/utilizing data**
- Lack of practical data-linking platforms
- Underdeveloped data communities

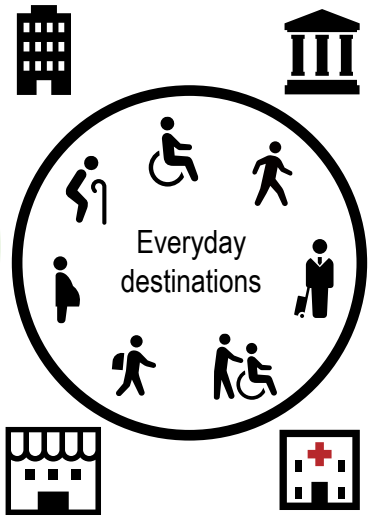


# 1-2 Subtheme I: Overall vision

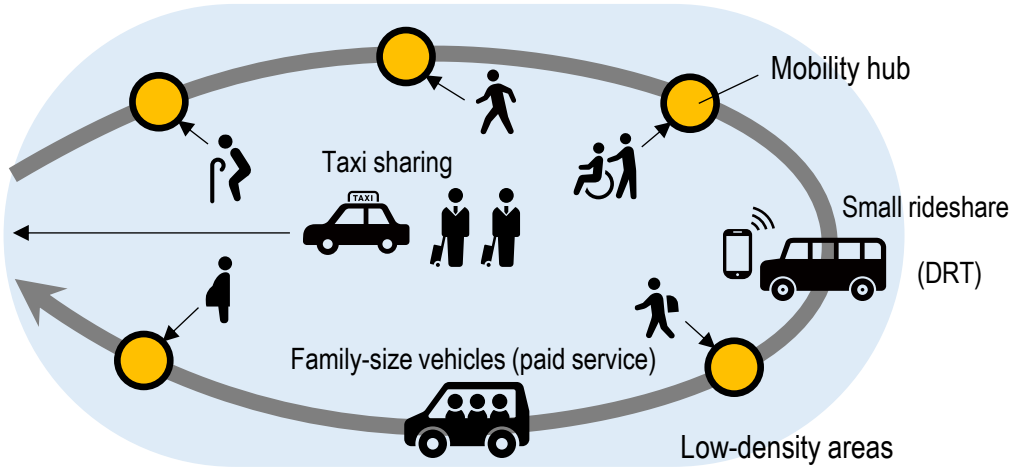
1) Provide safe, independent mobility services that help overcome local challenges
2) Help build sustainable, vital communities that erase the mobility divide

★Spaces where anyone can walk slowly with safety and peace of mind

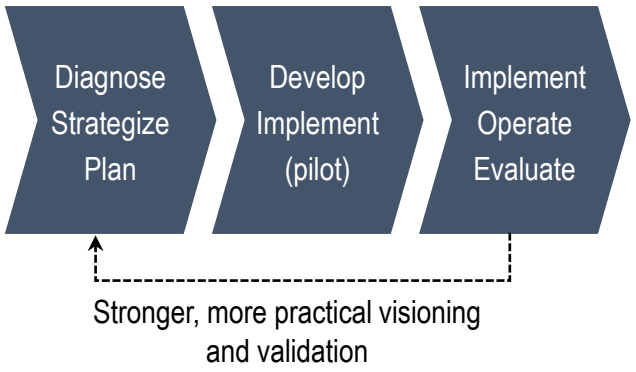


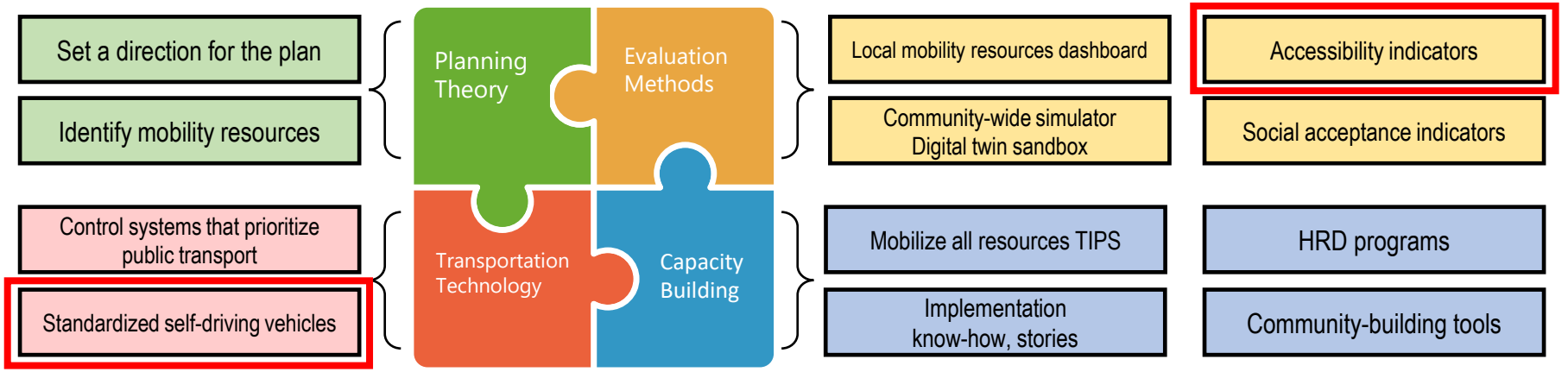




★Everyone can access public transportation within a 5-minute walk




Redesign process



# 1-3 Subtheme I: Overall strategy

Maturity of mobility services (XRL)

Planning Theory | Evaluation Methods | Transportation Technology | Capacity Building

## Testing phase

Verify the practical contribution of R&D outputs in pilot areas

Create quality spaces and evaluation tools, systematize planning principles

(Miyazaki City)

Use sandbox to build cooperation and consensus within urban planning


(Higashi-Hiroshima City)

Build more advanced mobility services around mobility hubs and develop evaluation indexes

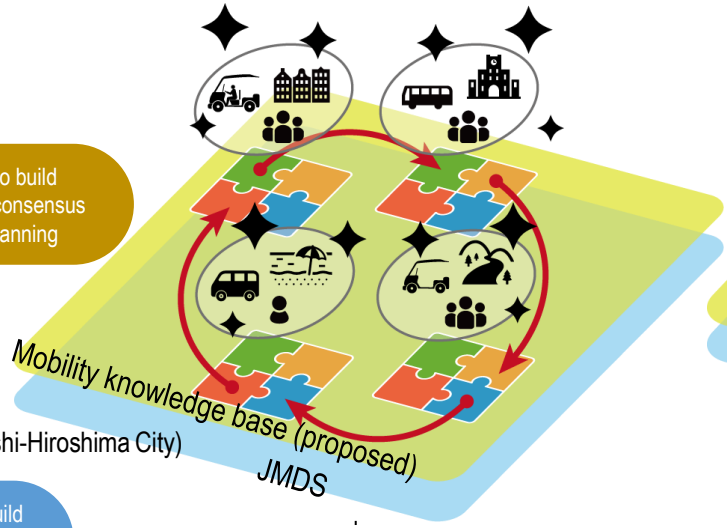
(Nishio City)

Develop people and build communities for the redesign of local transportation

(Towada City)

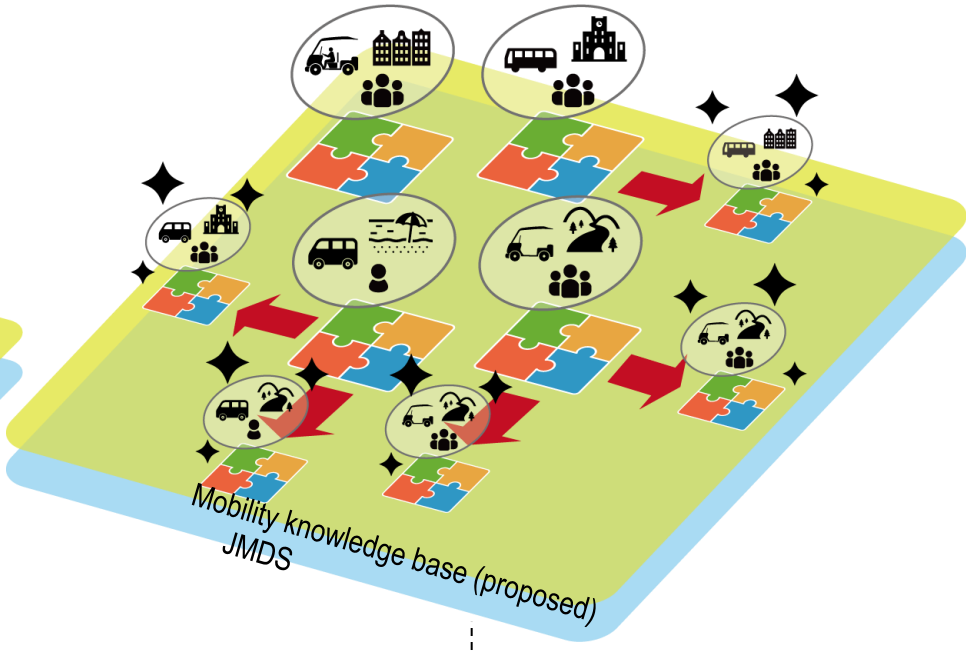
## Sharing/joint evolution phase

Use the platform to share outputs across consortia and improve the quality and staying power of mobility services in pilot regions




## Expansion/extended rollout phase

Expand the platform while utilizing SIP outputs in other locations, pushing ahead with sustainable mobility service redesign throughout the region



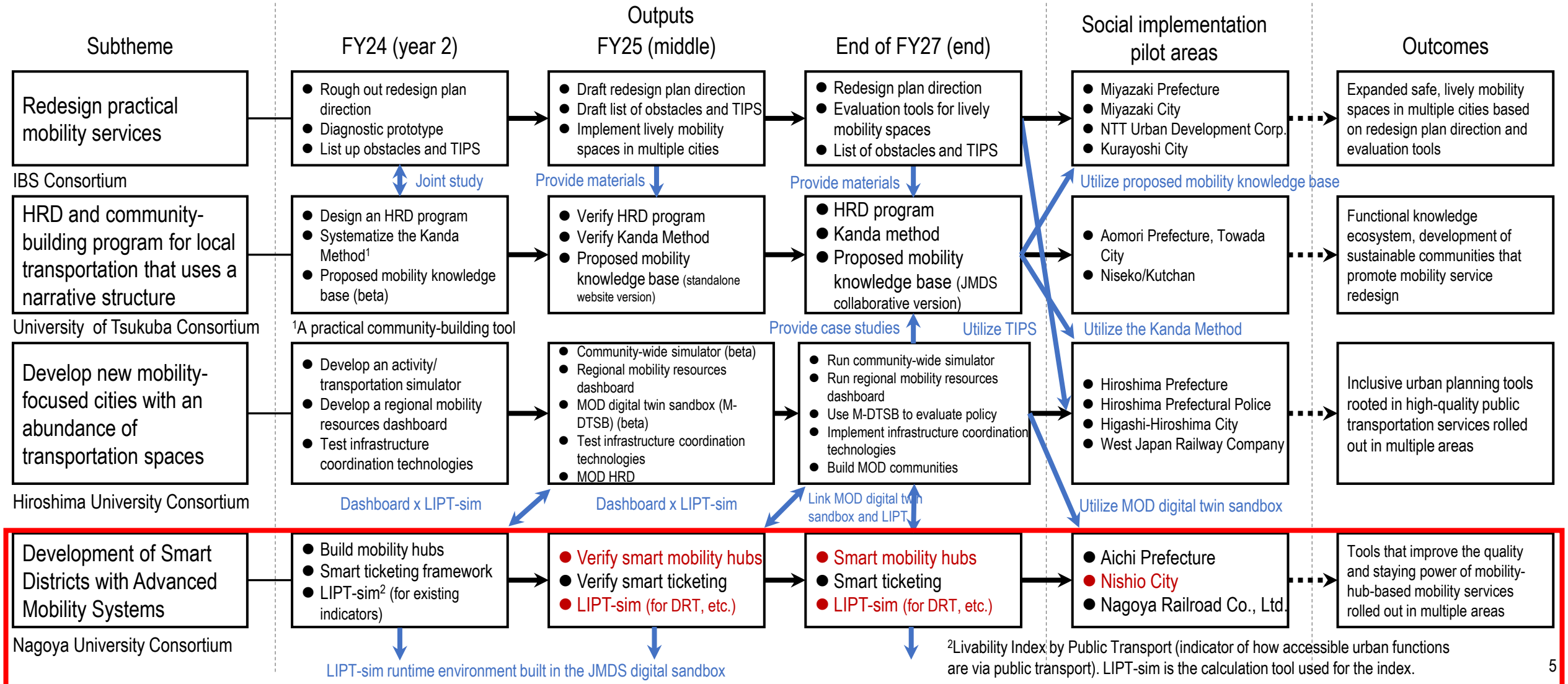

Stage gate (FY25)

End of SIP (FY27)

Post-SIP (FY28 onward)

# 1-4 Subtheme I: Overall roadmap

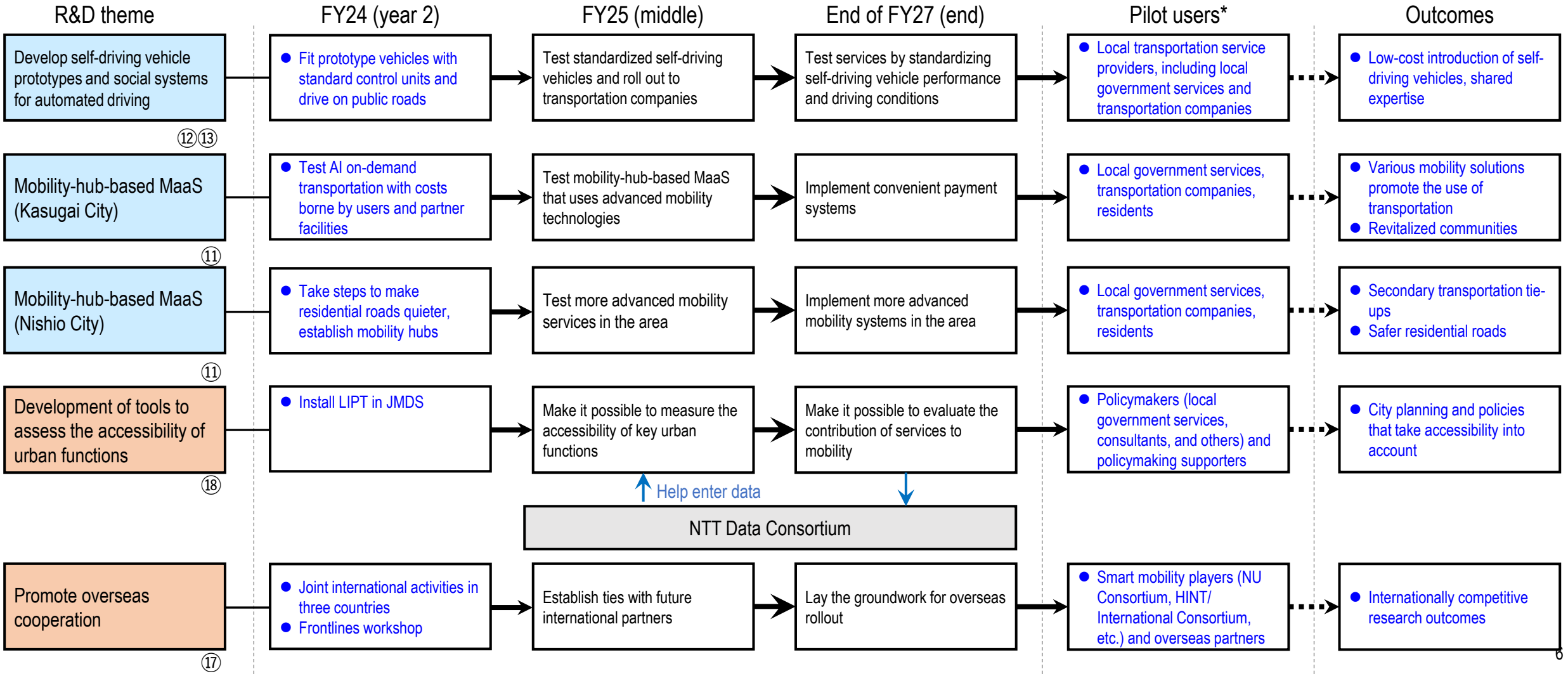
**VISION** (recap)
1) Provide safe, independent mobility services that help overcome local challenges
2) Help build sustainable, vital communities that erase the mobility divide




[2]Livability Index by Public Transport (indicator of how accessible urban functions are via public transport). LIPT-sim is the calculation tool used for the index.

# 2-1 R&D theme roadmap

- Developing self-driving vehicle prototypes will contribute to safe, independent mobility. Mobility-hub-based MaaS and the development of tools to assess the accessibility of urban functions will help create social systems that erase the mobility divide.



# 2-2 R&D Progress: Nagoya University Consortium

Create safe, convenient Smart Districts using the Smart Local Mobility concept, which is based on mobility hubs that serve as focal points for mobility and activity

**R&D leads**

東海国立大学機構 / 名古屋大学

連携

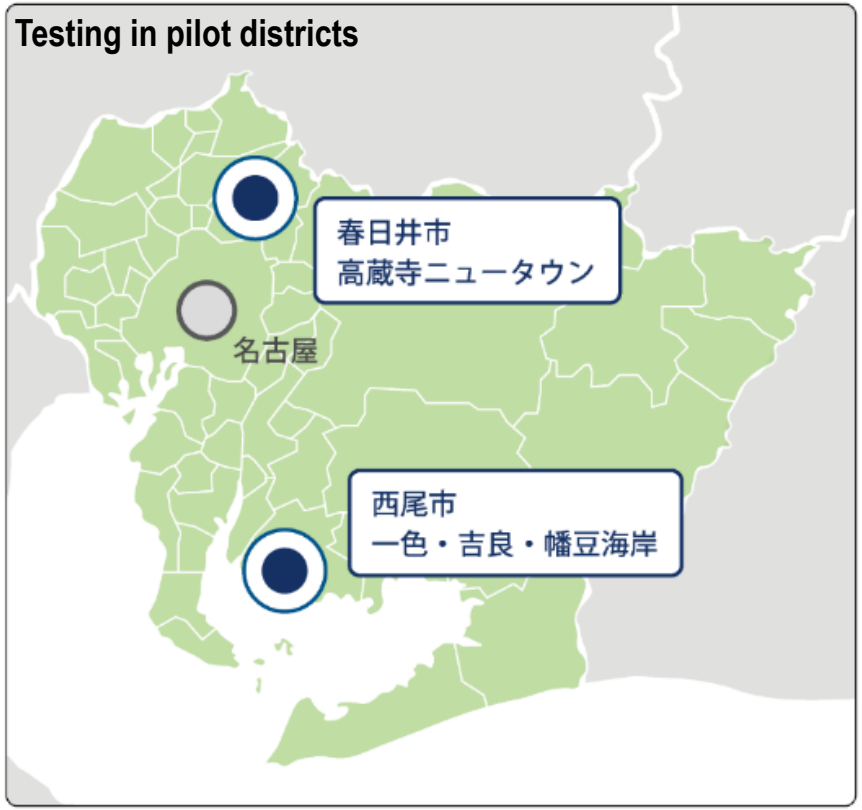
SiP — SIP Japan projects Smart mobility and other proposals

Internal smart mobility cooperation
- Digital twin/urban OS concept
- Fieldwork, classification, extended rollout
- Social acceptance of new technologies And more

**R&D themes**

- More advanced local mobility services
- Creating social systems and developing prototypes for self-driving vehicles
- Developing tools to evaluate accessibility to urban functions
- Promoting overseas cooperation

**Testing in pilot districts**

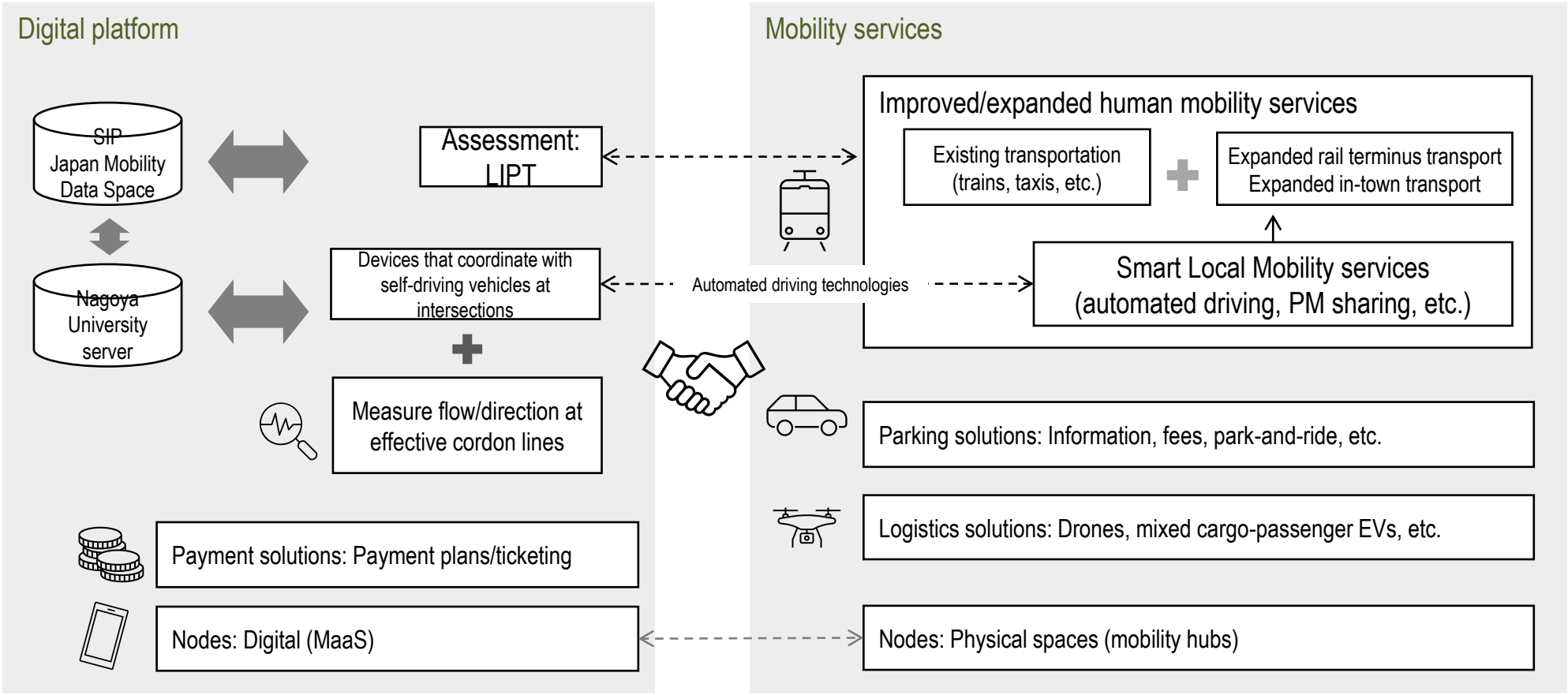



**Partners**

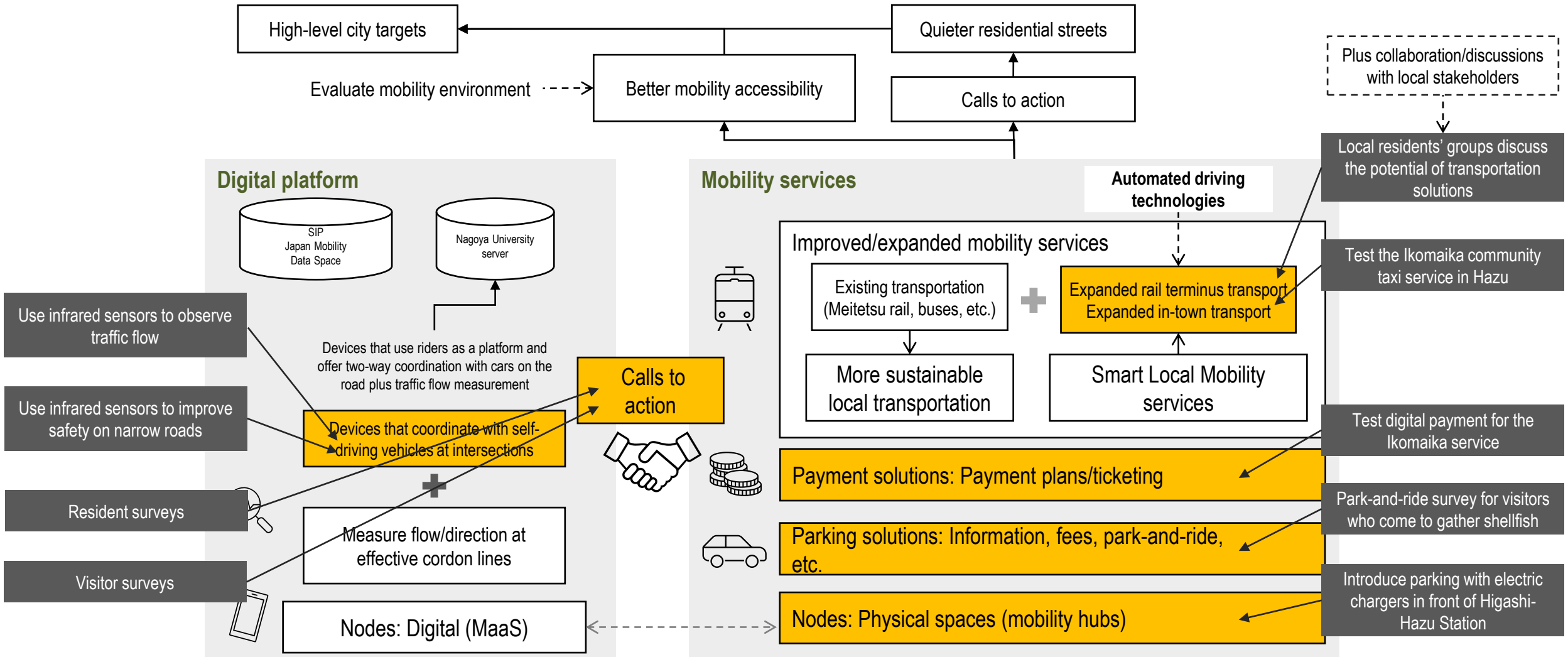
愛知県 Aichi Prefectural Government
西尾市
春日井市 kasugai City
MEITETSU
JR東海 Central Japan Railway Company
AZAPA ENGINEERING
株式会社オリエンタルコンサルタンツ
Nagoya University Venture
XXADE X Transformation by Autonomous Drive Enabler
Life & Mobility

# 2-2 R&D Progress: Nishio City initiatives (Isshiki, Kira, and the Hazu coast)

Turn areas without convenient transportation into Smart Districts by implementing mobility-hub-based physical mobility strategies (such as more advanced local mobility services, traffic flow/parking management, and logistics solutions) and linking them into digital solutions (such as transportation data, payment solutions, and MaaS apps)



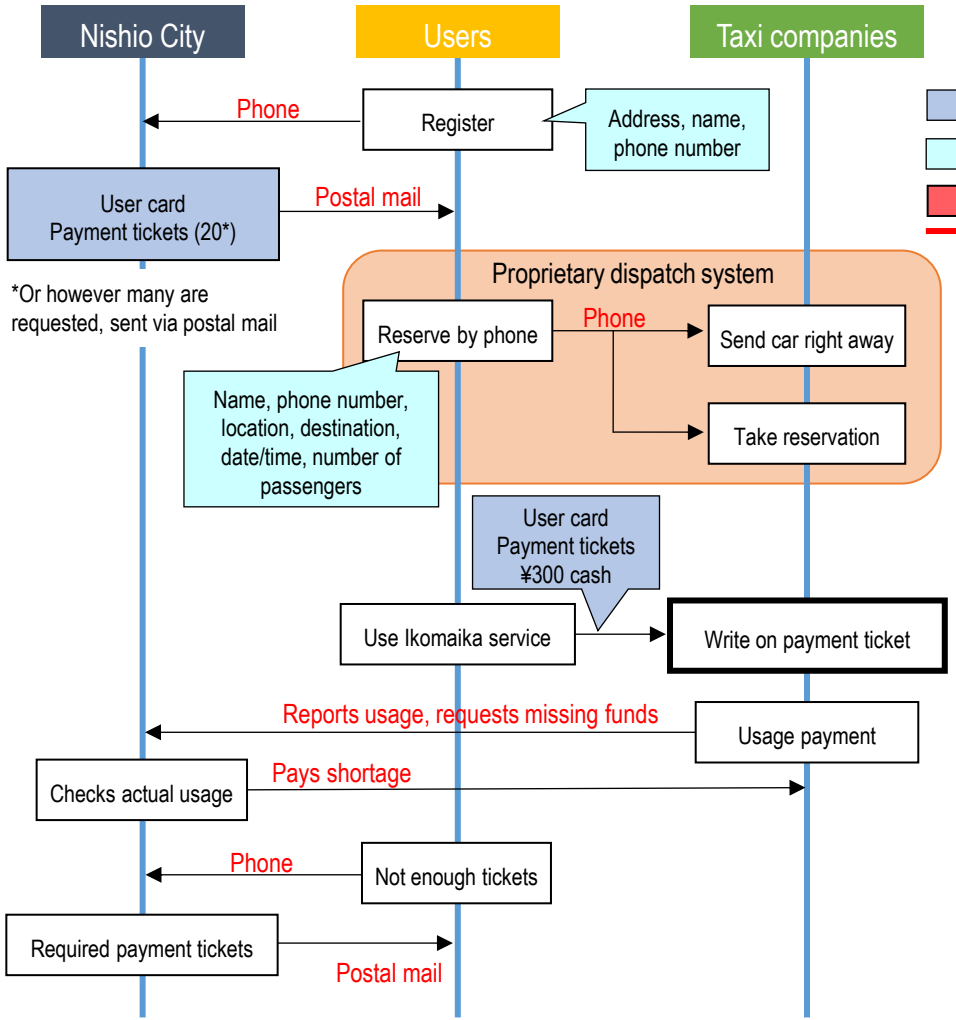
# 2-2 R&D Progress (Nishio City)



# 2-2 R&D Progress (Nishio City)

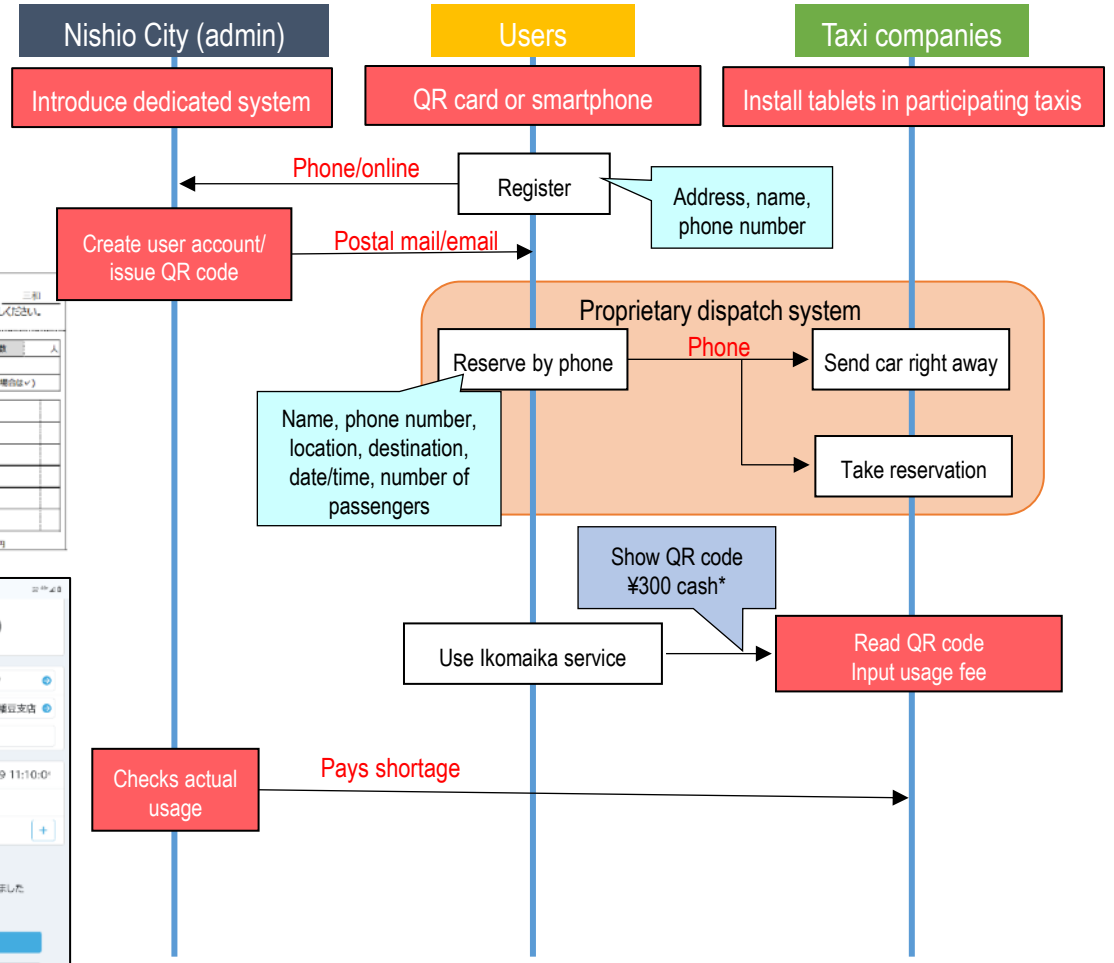
## Improved ticketing for the existing Ikomaika community taxi service

### Current operations flow





### After introducing the new system



# 2-2 R&D Progress (Nishio City)

## Testing advanced ticketing for transportation services

| | Details |
|---|---|
| **Purpose** | Residents rate public transportation as poor in the Hazu area, and there are efforts to improve the usage environment for the only public transportation service—the Ikomaika community taxi. During the test, a car was parked at a local area to verify operations. |
| **Period** | January 27–March 24, 2025 |
| **Time** | 9 AM–4 PM (seven hours) |
| **Vehicle** | One vehicle (parked outside Higashi-Hazu Station) |
| **Partner** | Meitetsu Tobu Transportation Co., Ltd. |

### Actual usage

| | Days analyzed | Unique IDs | Number of uses | | Fare | |
|---|---|---|---|---|---|---|
| | | | Total | Average | Total | Average |
| **January** | 5 | - | 39 | 7.8 | 56,170 | 11,234 |
| **February** | 20 | 36 | 173 | 8.7 | 236,260 | 11,813 |
| **March** | 16 | 50 | 170 | 10.6 | 240,370 | 15,023 |
| **Dec (prior to test)** | 19 | 28 | 151 | 7.9 | 173030 | 9,107 |

→User numbers steadily increased

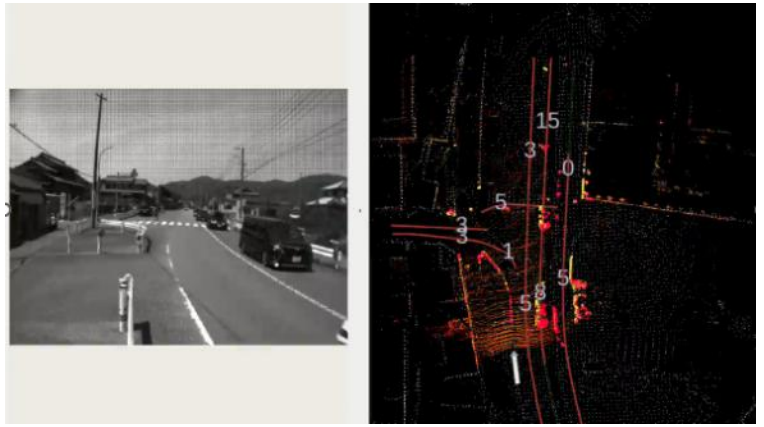

A senior takes her QR card from her wallet

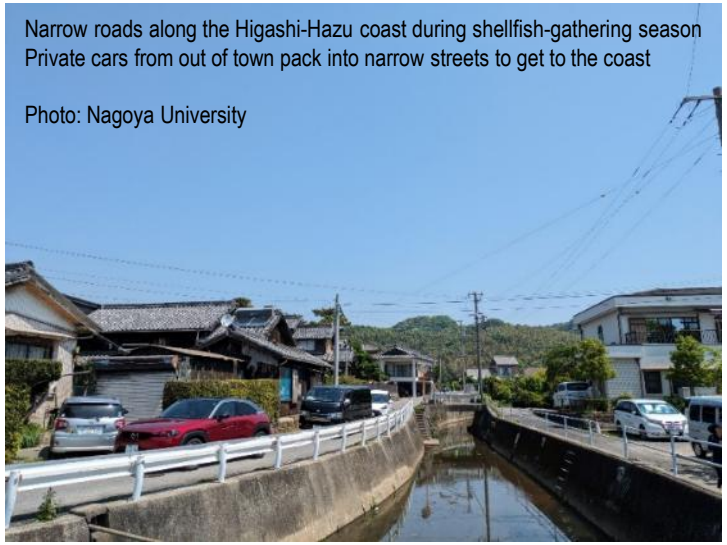
Payment using a dedicated terminal

# 2-2 R&D Progress (Nishio City)

## Nishio City: Studies and measures to make residential streets quieter

- Out-of-town visitors flock to the Higashi-Hazu coast during shellfish-gathering season, the majority by car
  - Cars flood into narrow residential streets, causing congestion and safety issues
  - The area needs a comprehensive solution that includes parking/parking information and mobility services
  - Traffic flow was measured during peak season in FY2024 to build support for automated driving technologies
    - LiDAR was confirmed as a way to measure traffic flow (see right)
    - Visitors were also surveyed and studies were done on parking conditions





Narrow roads along the Higashi-Hazu coast during shellfish-gathering season
Private cars from out of town pack into narrow streets to get to the coast

Photo: Nagoya University

The Higashi-Hazu coast during peak shellfish-gathering season (Golden Week)

Photo: Nagoya University

# 2-2 R&D Progress (Nishio City)

## Nishio City: Studies and measures to make residential streets quieter

- Surveyed visitors during the 2024 peak season (Golden Week holidays)
  - Visitors who came by car were asked what they thought about traffic, parking, and driving dangers
  - Visitors who said narrow passageways were dangerous: 11 out of 124 valid responses (8.9%)

    Note: The percentage was higher among respondents who actually drove through narrow passageways
- Second half of FY2024
  - Alerts were placed at entrances to narrow passageways using infrared sensors and other technologies
    - Started by using position information from self-driving vehicles
    - Plan is to use infrared sensors for general vehicle detection in the future


Dangerous areas identified during peak season in 2024 (Golden Week holidays)

Alert at a narrow road along the Higashi-Hazu coast that uses self-driving vehicle position information (February 2025)

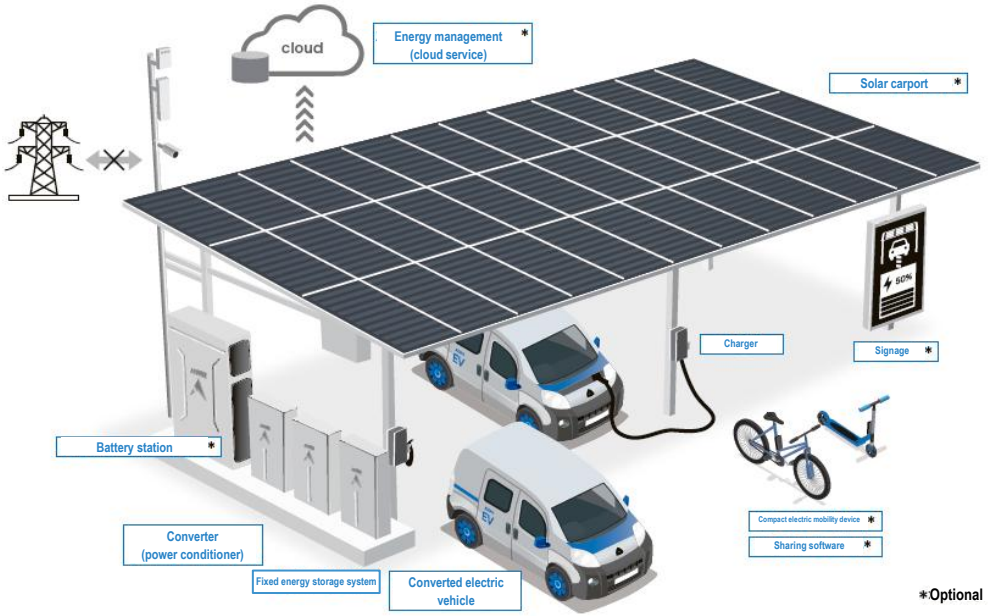
# 2-2 R&D Progress (Nishio City)

## Nishio City: Setting up mobility hubs to serve as physical nodes

- Rail (the Meitetsu-Gamagori line) is the primary form of public transportation in the Kira/Hazu area
  - However, in-town and train-terminus mobility services are limited (the Ikomaika community taxi service is available for residents)
  - In March 2025, facilities such as EV charging stations were set up to support a Meitetsu-Gamagori Higashi-Hazu Station mobility hub to serve as a physical node
  - The plan is to systematically study, design and roll out mobility services with the mobility hub as a central point

EV charging stations in front of Higashi-Hazu Station

Photo: Nagoya University




Source: AZAPA Co., Ltd. https://azapa.co.jp/index.php/2022/10/14/e-station/

# 2-2 R&D Progress (Kasugai City)

- Tested mobility-hub-linked MaaS in Kozoji New Town
  January–May 2024 (Jan–Feb: MLIT MaaS for Japan promotion/support projects, Aichi Smart City Model Project / Mar–May: SIP)
  Tested AI on-demand transportation dispatch reservations, bicycle-share rental procedures, and MaaS app tie-ups (coupons) as digital links

| | |
|---|---|
| Implementation period | January 9–May 24, 2024 (137 days) |
| Ports established | Six locations: Apita building, Gruppo Fujito, Fujiyamadai, Kozoji Station, Tokai Memorial Clinic, Nagoya Tokushukai General Hospital<br>Note: Reduced to four locations (eliminated medical facilities) after February 10 |
| Mobility services offered at ports (functions that could be used with signage) | Bicycle share (rental/return) 10 free spots<br>On-demand transportation services (dispatch request)<br>City buses (route search, timetables)<br>Electric wheelchairs (rental/return)<br>Note: Transportation IC cards could be used for rentals and other fees |
| MaaS app tie-up | Tie-up with the **Move! Kasugai** MaaS app |


| | | Average taps/day |
|---|---|---|
| Total | | 87.6 |
| Port | Apita | 22.1 |
| | Gruppo | 23.7 |
| | Fujiyamadai | 16.9 |
| | Kozoji Station | 23.5 |
| | Tokai Memorial | 3.3 |
| | Tokushukai | 3.0 |
| Content used | Bicycle share | 51.2 |
| | Shared taxi | 14.6 |
| | Electric wheelchairs | 18.8 |
| | Digital map | 12.3 |
| | Bus search | 4.5 |
| | Accessibility map | 3.1 |

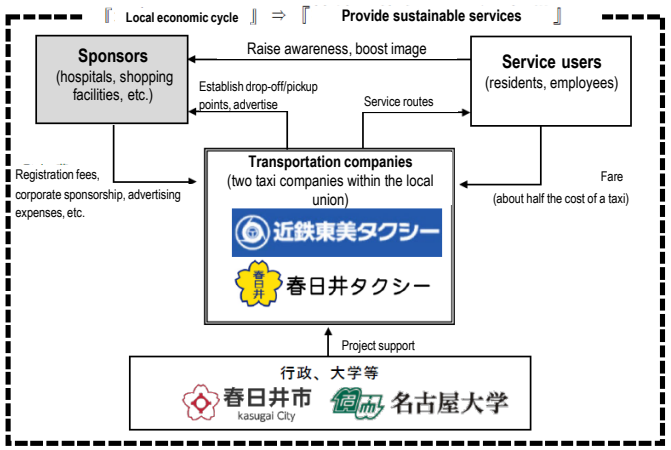
- Offerings were based on the features of each location, and long-term usage trends were identified (medical centers had little use)
- There was a lot of interest in bicycle share (large number of taps), and uses averaged 16/day
- Commercial feasibility is being studied based on usage data

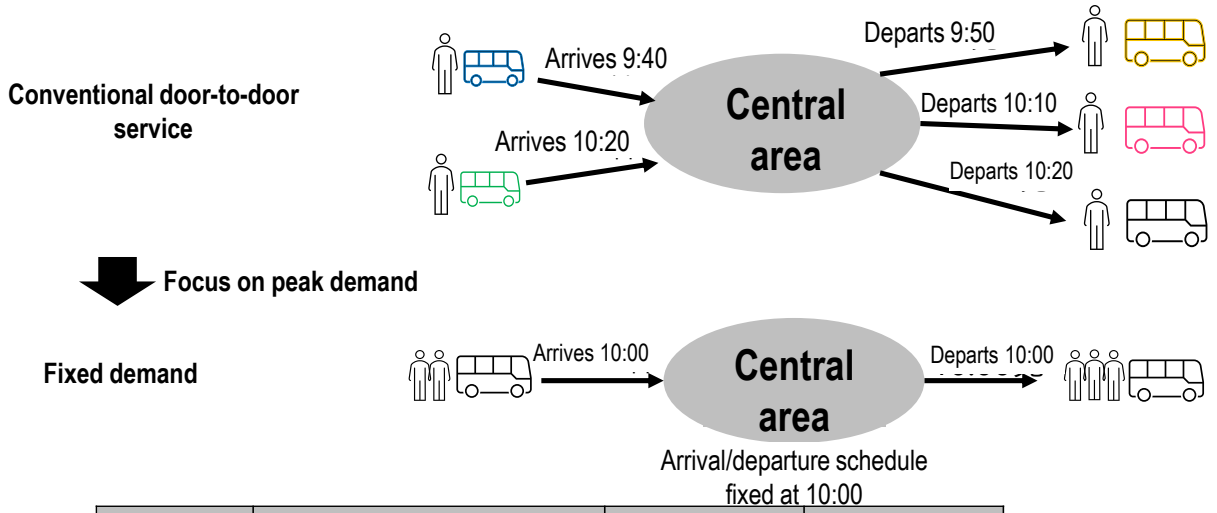
→Implementation would be difficult for a private business at this point (now looking at how government subsidies or support might look)

| | | Returned | | | | | Total |
|---|---|---|---|---|---|---|---|
| | | Apita Kozoji | Gruppo Fujito | Fujiyamadai | Kozoji Station Shimin Corner | Not returned to a port | |
| Rented | Apita Kozoji | 379 | 70 | 39 | 161 | 7 | 656 |
| | Gruppo Fujito | 73 | 313 | 48 | 58 | 5 | 497 |
| | Fujiyamadai | 38 | 51 | 242 | 51 | 2 | 384 |
| | Kozoji Station Shimin Corner | 167 | 62 | 36 | 412 | 2 | 679 |
| Total | | 657 | 496 | 365 | 682 | 16 | 2,216 |

# 2-2 R&D Progress (Kasugai City)

- Tested AI on-demand transportation at Kozoji New Town with users and partner facilities bearing the cost (based on the assumption of no government funding)
  →After a year of testing, it was determined that social implementation would be difficult and that a mechanism for government funding was needed
- Looking at ways to address the decline in users of shuttles provided by central shopping facilities
  →Study regular shopping facility shuttle simulations with AI on-demand transportation as a new form of operation (reported at the Committee of Infrastructure Planning and Management)


| | Indicator | Door-to-door | Fixed demand (no dedicated vehicles) |
|---|---|---|---|
| Operational efficiency | Number of vehicles required | 5 | 5 |
| | Average passenger density (people per vehicle) | 1.11 | 1.68 |
| | Total travel distance (km per day) | 884 | 802 |
| | Travel time (hours per vehicle) | 11.5 | 10.7 |
| Convenience | Average ride time (minutes per trip) | 10.1 | 17.9 |
| | Average trip time (minutes per trip) | 5.1 | 12.8 |

# 2-2 R&D Progress (accessibility)

## Evaluating the accessibility of urban functions via public transport

**BACK-GROUND**

- The focus of local transportation planning and evaluation should be whether accessibility to urban functions is sufficiently ensured
  - Accessibility evaluations need to look beyond operational frequency and coverage. There is a lot of academic research on those indicators.
  - Practically speaking, however, the usual practice has been to evaluate circular areas around transportation nodes (coverage assessment) (aware of limited data/manpower)
  - In addition to the evaluation indicators that have been used to collect academic data so far, it is essential to have a system that is practical to use

**AIMS**

- Proposed an indicator for evaluating the level of local transportation services in terms of accessibility to urban functions (roundtrip)
- Set up and published a tool/system to easily calculate multiple indicators (compatible with standard data formats)

- Link academic data relevant to accessibility evaluations to planning and policymaking to improve quality and reduce manpower
- Create an accessibility planning platform* for local transportation planning and policymaking

*Takami, Kiyoshi. "Framework of Accessibility Planning and its Application to Spatial Planning in England". *Reports of the City Planning Institute of Japan* (2011). Vol. 10(3), pp. 145-148

LiPT
Livability Index by Public Transport

Multiple concepts covered by LIPT (Livability Index by Public Transport)

- ☐ Newly proposed indicator: LIPT
- ☐ Set of easy-to-use calculation tools that include existing indicators: LIPT-sim

# 2-2 R&D Progress (accessibility)

## LIPT-sim rollout in JMDS

- The first round of LIPT-sim was installing a calculation tool compatible with the standard data format used in existing indicators
  - Existing indicators are based on PTAL/GMAL developed in the UK, and evaluate the level of public transportation services around a given point
  - The standard data format is General Transit Feed Specification (GTFS) for fixed time/fixed route transportation
- Installed the first-round LIPT-sim tool in the Japan Mobility Data Space (JMDS) digital sandbox in December 2024*
  - Through discussions with and advice from PDC/SPDs within SIP Smart Mobility, this was the first installation of JMDS content via consortia collaboration
  - Calculations are Japan-only for the time being, with GTFS data linked to the GTFS data repository developed and operated by AIGIT

- There are plans to steadily improve/expand the current tool in terms of features and compatible indicators
  - The March 2025 update expanded two features and has already been released on JMDS

### Now compatible with user-supplied data

- Users can now upload their own data, even if it is not in the GTFS data repository
  - Calculations now handle data outside of Japan along with virtual data in addition to Japan data that has not yet been recorded

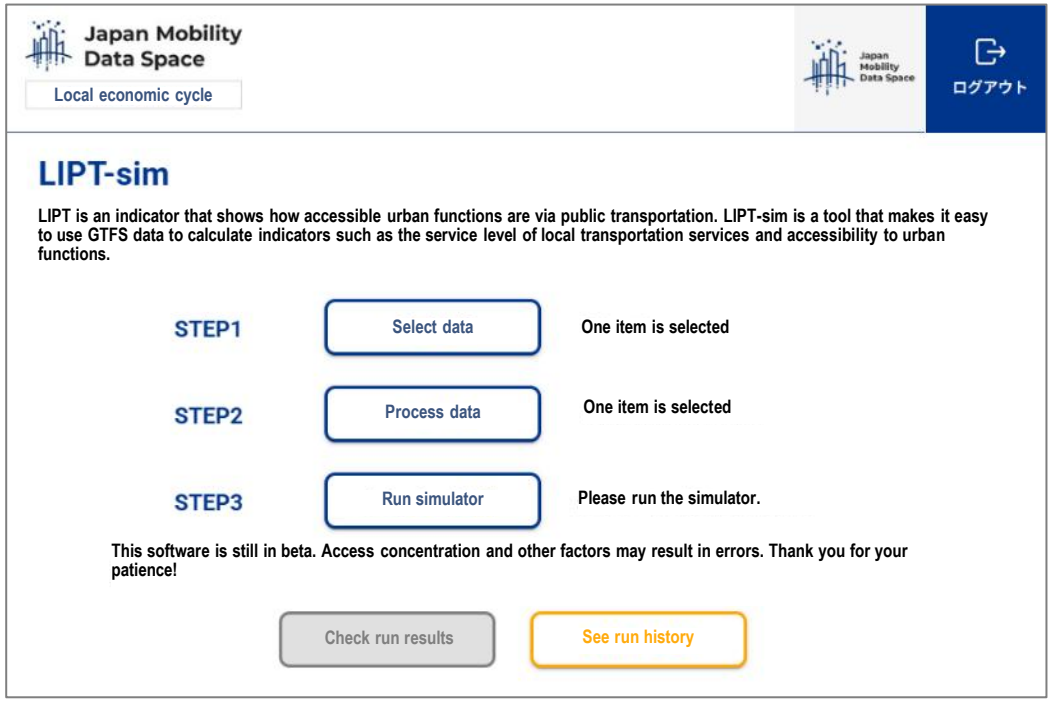
### New standalone GTFS file selection feature

- There is now a standalone service in JMDS that allows for the selection of GTFS repository data tied to certain local government bodies
  - Given that local governments and operators do not correlate one-to-one in Japan, a feature was added where users can select a local government body to automatically select GTFS data for all mobility services operated within that jurisdiction. This added feature makes the tool even more convenient by pre-processing data for various types of analysis.

# 2-2 R&D Progress (accessibility)

## LIPT-sim rollout in JMDS

### Example screen



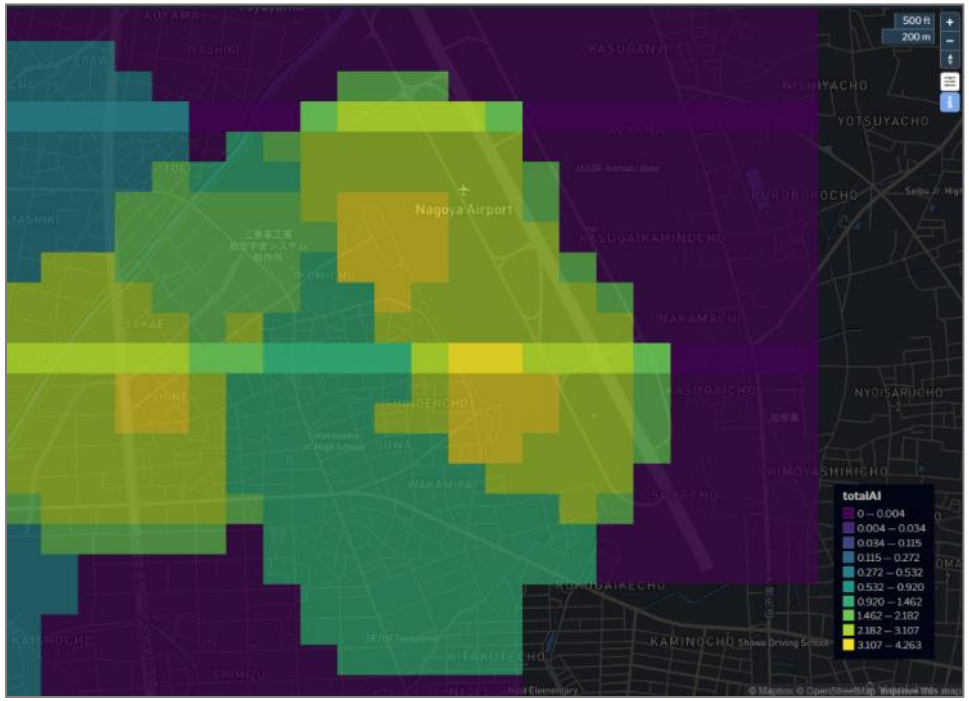

Warmer colors indicate higher service density

Can be accessed in a web browser and exported to GeoJSON and other formats

- Supports GTFS data uploads
- Users can get GTFS data repository files by selecting the name of the local government body they want to do calculations for

- Calculate accessibility indicators
- On-screen graphics and resulting files can be exported

### Sample calculation results



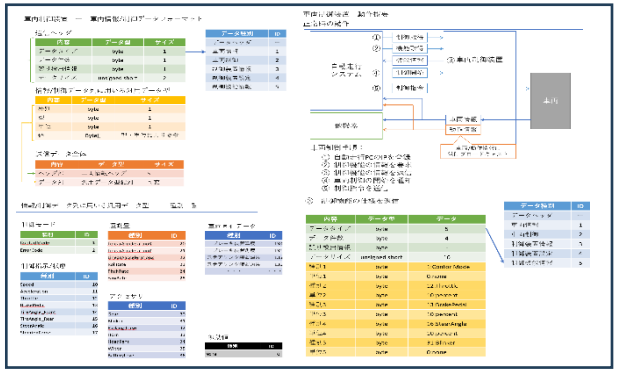

Source: NTT data press release: https://mobility-data-space.jp/news/news09/ / Japan Mobility Data Space: https://www.catalog.mobility-data-space.jp/

# 2-2 R&D Progress (automated driving prototype)

**OUTCOME** Set up a standard self-driving car prototype and tested it on public roads

- Setting up the prototype vehicle
  - Modified an electric kei-car so that the steering wheel, accelerator, brake, and other features could be externally controlled
  - Installed standard-specification vehicle control devices
  - Installed LiDAR and other sensors and tested it using the Autonomous Drive Enabler developed at Nagoya University (ADENU)
- Formulating standard control specifications
  - Utilized a general-purpose design that allows for different combinations fo vehicles and automated driving software
  - Redundancies allow a single vehicle to be controlled by multiple systems (automated driving software, remote monitoring, etc.)

Prototype vehicle



Standard control specifications

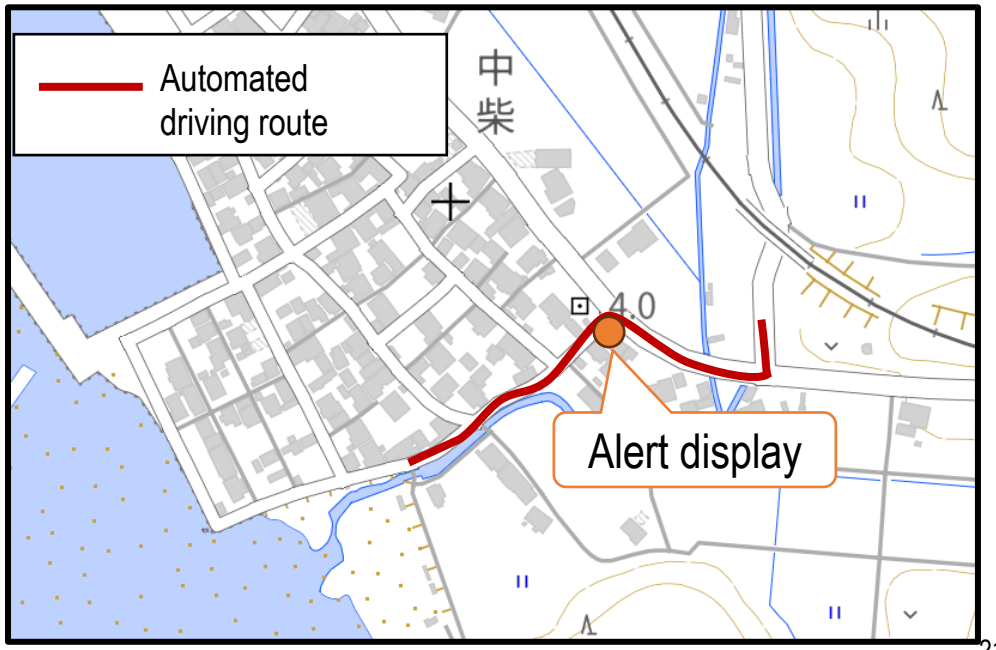
# 2-2 R&D Progress (automated driving prototype)

**TEST** Closed circuit test (Kasugai, Aichi Prefecture)

Date: January 14, 2025
Location: Kasugai City Gymnasium parking lot
Testing details
- Had the prototype vehicle create a map
- Tested prototype vehicle operation (under 15 km/h)


**TEST** Public road test (Nishio, Aichi Prefecture)

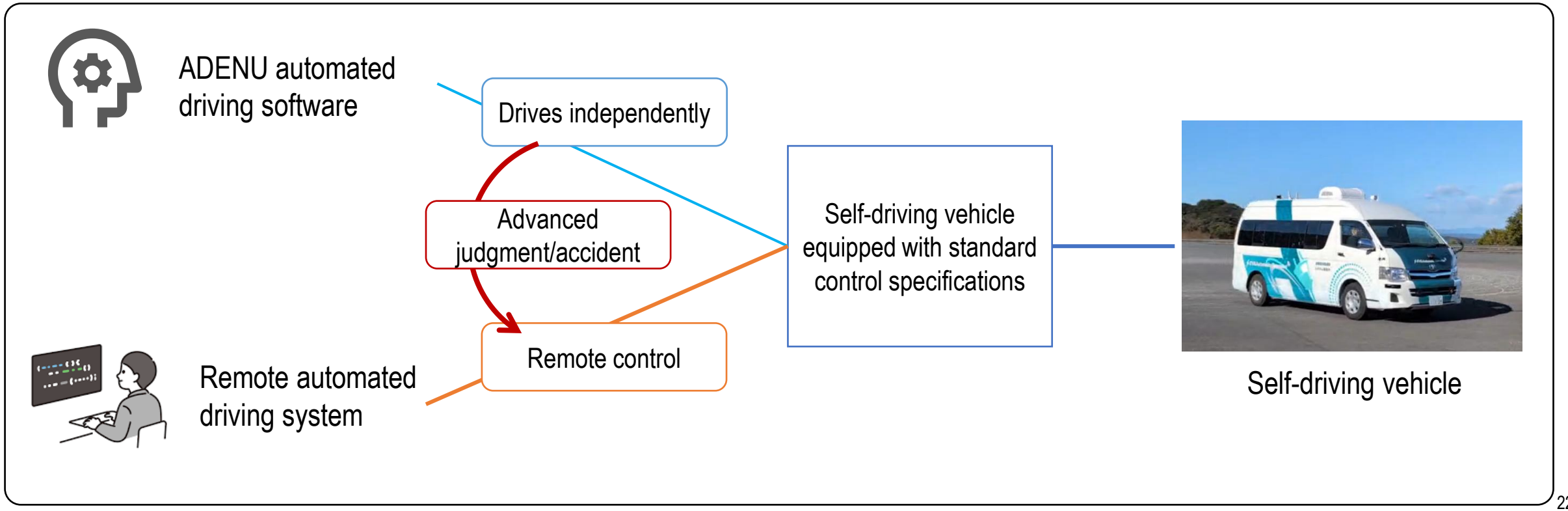
Date: February 16–19, 2025
Location: Narrow roads along the Higashi-Hazu coast
Testing details
- Operated prototype vehicle (under 15 km/h)
- Linked to roadside display with a self-driving vehicle alert



# 2-2 R&D Progress (automated driving prototype)

**OUTCOME** Extended rollout of standard self-driving vehicles

- Nagoya University COI-Next worked with with Tokyu and Soliton Systems to develop and install standard control specifications to remotely control self-driving vehicles
- The setup allows the vehicles to be controlled without passing through the self-driving system



# 2-2 R&D Progress

## Overseas rollout

- Searched for and shortlisted collaborators based on outcomes from other SIP themes
- In addition to rolling out Japan outcomes overseas, we are looking at at promoting development in Japan that leverages overseas initiatives and environments (utilizing lessons learned in both directions)

### Chulalongkorn University
### Kasetsart University

- Around 20 researchers from multiple disciplines shared their work in October 2024
- There was great interest in mobility hubs, automated driving, shared mobility, and other topics. We are continuing to monitor along with the Nakamura SPD project (Bang Sue).

### Pontifical Catholic University

- Brazilian researchers visited Nagoya in April 2024 for field visits and seminars
- In January 2025, HINT members traveled to Brazil to attend a workshop with local researchers, students, and urban planners and share information on smart mobility initiatives
- We plan to extend an invitation to IAB and MIWJ 2025, work with international consortia, and continue reinforcing ties

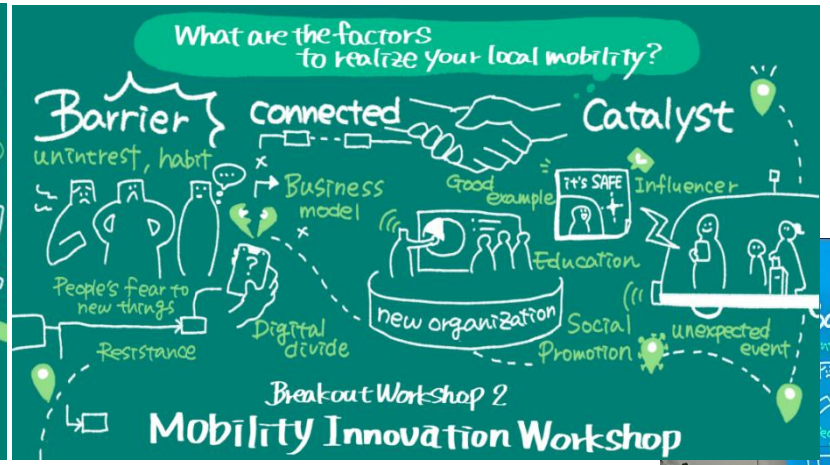
### University of Western Australia
### University of Sydney, Griffith University

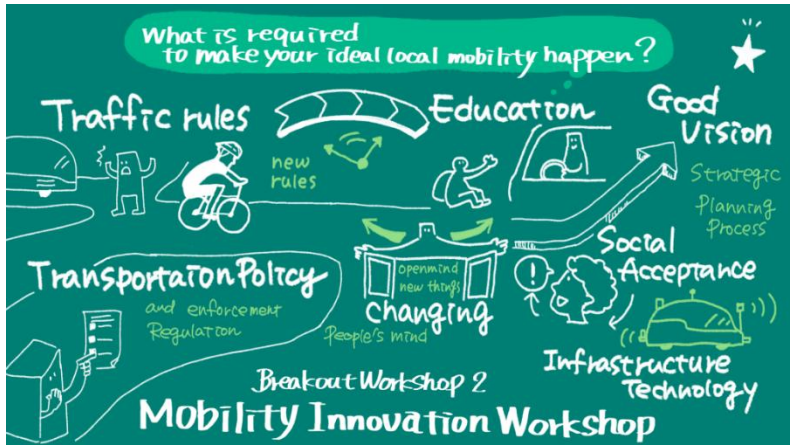
- Researchers from Western Australia visited in conjunction with MIWJ 2024 in November for an exchange of ideas
- Our consortium traveled to Australia in February/March 2025 to provide more detail on our initiatives and meet about our ongoing collaboration
- We have already agreed on a rough plan to hold a larger Japan-Australia workshop in mid-2025 (in collaboration with HINT and international consortia)

# 2-2 R&D Progress

## Spreading information through the Mobility Innovation Workshop

- Nagoya University hosted 2024 Mobility Innovation Week Japan in November 2024
- We worked with international consortia (University of Tokyo) to bring in PhD students and post-docs for a “frontlines workshop” to sort out future mobility challenges
  - The team made use of graphic recording techniques to bring together members from host of regions, including Japan, France, Taiwan, Thailand, Australia, China, and Indonesia and discuss local conditions and challenges

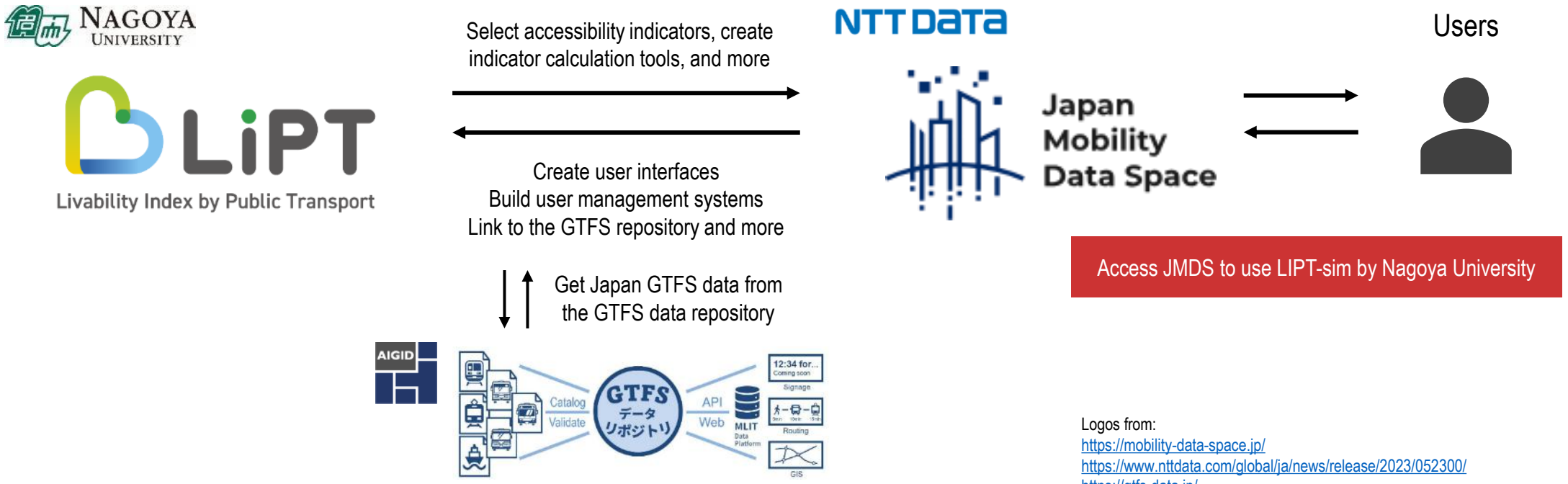




# 2-3 Other consortia, themes, and ministerial collaborations

## LIPT-sim rollout in JMDS

- Installed the first round of LIPT-sim and other tools in the Japan Mobility Data Space (JMDS) (December 2024*)
  - Through discussions with and advice from PDC/SPDs within SIP Smart Mobility, this was the first installation of JMDS content via consortia collaboration
  - Calculations are Japan-only for the time being, with GTFS data linked to the GTFS data repository developed and operated by AIGIT
  - There are plans to steadily improve/expand the current tool in terms of features and compatible indicators

**Linked with JMDS for quick install and safe user management**

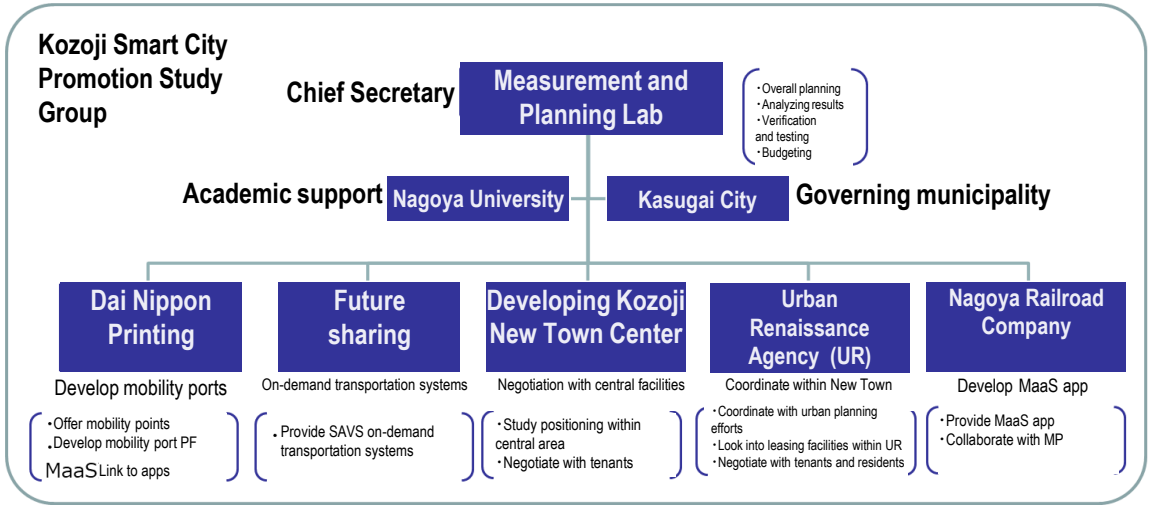



Access JMDS to use LIPT-sim by Nagoya University

Logos from:
https://mobility-data-space.jp/
https://www.nttdata.com/global/ja/news/release/2023/052300/
https://gtfs-data.jp/

# 2-3 Other consortia, themes, and ministerial collaborations

## National and prefectural support for the Kozoji New Town mobility hub tests




| | FY2022 | FY2023 |
|---|---|---|
| Implementation period | January 30–March 3, 2023 (33 days) | January 9–May 24, 2024 (137 days) |
| Ports established | Five locations: Apita Building, Gruppo Fujito, Fujiyamadai, Tokai Memorial Clinic, Tokushukai General Hospital) | Six locations: Apita Building, Gruppo Fujito, Fujiyamadai, Tokai Memorial Clinic, Tokushukai General Hospital, Kozoji Station)<br>Note: Reduced to four locations (eliminated medical facilities) after February 10 |
| Mobility services offered at ports (functions that could be used with signage) | Bicycle share (rental/return)<br>On-demand transportation services (dispatch request)<br>City buses (route search, timetables) | Bicycle share (rental/return)<br>On-demand transportation services (dispatch request)<br>City buses (route search, timetables)<br>Electric wheelchairs (rental/return)<br>Note: Transportation IC cards could be used for rentals and other fees |
| MaaS app tie-up | None | Tie-up with the Move! Kasugai MaaS app |
| Financial support (funded projects) | • Smart City Implementation Support Project, City Bureau, MLIT<br>• Independent development by Dai Nippon Printing | • Japan MaaS Promotion and Support Project, Policy Bureau, MLIT<br>• Smart City Promotion Project, Aichi Prefecture<br>• SIP Term 3 and other projects, Nagoya University<br>• Independent development by Dai Nippon Printing and Nagoya Railway Company |

# 2-3 Other consortia, themes, and ministerial collaborations

## Collaboration with the Aichi Mobility Innovation Project (“The Aichi 2030 model linking the roads and the skies”)

- The Nagoya University Consortium teamed up with a remote island logistics model using drones between Isshiki and Saku Island
  - Frequent drone deliveries between Isshiki Port and Saku Island were tested October 7–November 5, 2024
  - In FY2025 there are plans to build a mobility hub on Saku Island and test mixed cargo-passenger runs using EVs and self-driving EVs in addition to drone logistics

# 2-4 R&D support from outside the consortia

- In addition to ventures originating at Nagoya University, we provide opportunities for local ventures in Aichi Prefecture by incorporating them into the framework.
- In collaboration with the the “Aichi 2030 model linking the roads and the skies” Aichi Mobility Innovation Project, we are building partnerships with drone startup companies and mobility startups such as Map-NAGOYA, part of the Chubu Economic Federation.
- Regular meetings are held involving Nagoya University, local transportation operators (Meitetsu), local governments (Nishio City), and companies capable of providing various solutions (AZAPA Engineering) as a platform for discussion. Nagoya University, Nishio City, and AZAPA Engineering in particular signed an MOU for three-way partnership and collaboration at the start of the SIP.

## Support from Meitetsu Tobu Transportation

- Hazu in Nishio City is one of the areas where Meitetsu Tobu Transportation was founded
- Support for testing (in addition to advice when building systems)
- Support with extended rollout of developed systems (planned)


Sales office in front of Higashi-Hazu Station in the late 1950s

## Kasugai City

- Signed a Cooperation and Collaboration Agreement with Nagoya University (March 2021)
- Introduced advanced mobility initiatives in Kozoji New Town under the regional public transportation plan
- Shared a vision for the Kozoji “Renew” Town Plan
- Conducted testing and discussed implementation of the Kozoji Smart City Action Plan (Urban Bureau, MLIT)


4 先進技術の活用による移動手段の確保

≪施策の内容≫

高蔵寺ニュータウンなど、丘陵地にある地形条件から、高齢者などがバス停へ移動する際に身体的負担が大きい状況にある地域は、地域生活交通を検討するエリアとして位置づけています。そのような地域では、高齢者の生活環境の向上と多世代居住の促進に向け、団地内の店舗や最寄りのバス停への移動について限られた人的資源できめ細かい対応をするため、先進技術を活用した自動運転車両によるラストマイル自動運転やＡＩオンデマンド乗合サービスなどの移動手段の導入を図ります。

■自動運転車両の実証実験（2019 年）

■相乗りタクシー実証実験（2019 年）

≪施策の実施主体・スケジュール≫

| 施策 | 実施主体 | 2021 年 | 2022 年 | 2023 年 | 2024 年 | 2025 年 |
|---|---|---|---|---|---|---|
| ①ラストマイル自動運転の導入 | 名古屋大学 春日井市 | 実証実験 | 本格運行 | | | |
| ②ＡＩオンデマンド乗合サービスの導入 | 名古屋大学 春日井市内タクシー組合 春日井市 | 本格運行 | 自主運行 | | | |


## Aichi Prefecture

- Collaborated with the SIP Nagoya University Consortium to develop a remote-island logistics model utilizing drones between Isshiki and Saku Island
- Frequent drone deliveries between Isshiki Port and Saku Island were tested October 7–November 5, 2024
- In FY2025 there are plans to build a mobility hub on Saku Island and test mixed cargo-passenger runs using EVs and self-driving EVs in addition to drone logistics